

## CLAIMS

What is claimed is:

1. A topically-applied thermal device comprising a flexible plastic containment and activatable thermochemical liquid composition encased therein, said flexible plastic containment comprising a multilayer film comprising:  
an outer polymeric barrier layer comprising an oxide coating; and  
an inner polymeric sealant layer.
2. The thermal device according to claim 1, further comprising an adhesive layer laminating together said outer polymeric barrier layer and said inner polymeric sealant layer.
3. The thermal device according to claim 1, wherein said oxide coating is selected from the group consisting of aluminum oxide and silicone oxide.
4. The thermal device according to claim 1, wherein said outer polymeric barrier layer comprises polyester.
5. The thermal device according to claim 1, wherein said inner polymeric sealant layer comprises a blend of low density polyethylene (LDPE) and ethylvinyl acetate (EVA).
6. A topically-applied thermal device comprising a flexible plastic containment and activatable thermochemical liquid composition encased therein, said flexible plastic containment comprising a multilayer film comprising:  
an outer polymeric barrier layer comprising polyester, said outer layer further comprising an oxide coating on the interior surface of said polyester layer;

an inner polymeric sealant layer comprising a blend of low density polyethylene (LDPE) and ethylvinyl acetate (EVA); and

an adhesive layer between said outer layer and said inner layer.

7. The thermal device according to claim 6, wherein said oxide coating comprises aluminum oxide.
8. The thermal device according to claim 6, wherein said thermochemical liquid composition comprises a supersaturated aqueous mixture comprising a chemical salt.
9. The thermal device according to claim 8, wherein said thermochemical liquid composition comprises aqueous sodium acetate; aqueous sodium thiosulfate; or aqueous magnesium sulfate.
10. The thermal device according to claim 6, wherein said adhesive layer comprises an ethyl acetate/aromatic polyisocyanate/methyl acetate blend.